

Notice of Allowability

Application No.

10/628,031

Examiner

Walter D. Griffin

Applicant(s)

MILLER, STEPHEN J.

Art Unit

1764

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment and terminal disclaimer, both filed on January 23, 2006.
2. ☒ The allowed claim(s) is/are 27-30.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

EXAMINER'S AMENDMENT AND REASONS FOR ALLOWANCE

Examiner's Amendment

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

The application has been amended as follows:

The first paragraph on page 1 of the specification has been replaced with the following paragraph:

"This application is a continuation of application serial number 09/107,835, filed on June 30, 1998, now U.S. Patent 6,663,768, which claims benefit of U.S. provisional patent application serial number 60/077,070, filed March 6, 1998, the specification of which is incorporated herein by reference for all purposes."

In the claims (Note: this amendment is presented only to provide the proper status identifiers for claims 1-26; no changes have been made to claims 27-30.)

Claims 1-26 (canceled)

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- Claim 27 (Previously presented) A process for preparing an oil suitable for use as a lubricating oil base stock comprising:
- a) sulfiding a dewaxing catalyst comprising a molecular sieve having 1-D pores with a pore diameter of between about 5.0 Å and about 7.0 Å, and at least Group VIII metal; and thereafter
 - b) contacting a waxy feed over the catalyst contained in step a) at a pressure of from about 15 psig (103 kPa) to about 2500 psig (13.8 Pa) to partially dewax the feed by converting between 80% to 97% of the wax contained in the waxy feed thus producing an isomerized oil having a pour point of at least 6°C above a target pour point; and, thereafter
 - c) solvent dewaxing the isomerized oil obtained in step b) to produce a lubricating oil base stock having a viscosity index of greater than 140, a target pour point of less than or equal to -20°C and a branching index of less than 1.75.

- Claim 28 (Previously presented) A process for preparing an oil suitable for use as a lubricating oil base stock comprising:
- a) pre-sulfiding a dewaxing catalyst comprising a molecular sieve having 1-D pores with a pore diameter of between about 5.0 Å and about 7.0 Å, and at least Group VIII metal; and thereafter
 - b) contacting a waxy feed over the catalyst contained in step a) comprising a molecular sieve at a pressure of from about 15 psig (103 kPa) to about 2500 psig (13.8 MPa) to partially dewax the feed by converting between 80% to 97% of the wax contained in the waxy feed thus producing an isomerized oil having a pour point of greater than about 0°C; and, thereafter
 - c) solvent dewaxing the isomerized oil obtained in step b) to produce a lubricating oil base stock having a pour point of less than or equal to -10°C, a viscosity index of greater than 140 and a viscosity, measured at 100°C, of about 3 cSt or less and a branching index of less than 1.75.

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Claim 29 (Previously presented) A process for preparing an oil suitable for use as a lubricating oil base stock comprising:

- a) sulfiding a dewaxing catalyst comprising a molecular sieve having 1-D pores with a pore diameter of between about 5.0 Å and about 7.0 Å, and at least one Group VIII metal; and thereafter
- b) contacting a Fischer-Tropsch waxy feed over the catalyst obtained in step a) at a pressure of from about 15 psig (103 kPa) to about 2500 psig (13.8 MPa) to partially dewax the feed by converting between 80% to 97% of the wax contained in the waxy feed thus producing an isomerized oil having a pour point of at least 6°C above a target pour point; and, thereafter
- c) solvent dewaxing the isomerized oil obtained in step b) to produce a lubricating oil base stock having a viscosity index of greater than 140, a target pour point of less than or equal to -20°C and a branching index of less than 1.75.

Claim 30 (Previously presented) A process for preparing an oil suitable for use as a lubricating oil base stock comprising:

- a) pre-sulfiding with H₂S a dewaxing catalyst comprising a molecular sieve having 1-D pores with a pore diameter of between about 5.0 Å and about 7.0 Å, and at least one Group VIII metal; and, thereafter
- b) contacting a Fischer-Tropsch waxy feed over the catalyst obtained in step a) comprising a molecular sieve at a pressure of from about 15 psig (103 kPa) to about 2500 psig (13.8 MPa) to partially dewax the feed by converting between 80% to 97% of the wax contained in the waxy feed thus producing an isomerized oil having a pour point of greater than 0°C; and, thereafter
- c) solvent dewaxing the isomerized oil obtained in step b) to produce a lubricating oil base stock having a pour point of less than or equal to -10°C, a viscosity index of greater than about 140 and a viscosity, measured at 100°C, of about 3 cSt or less and a branching index of less than 1.75.

Claims 31 and 32 (Canceled) Without prejudice.

Reasons for Allowance

The following is an examiner's statement of reasons for allowance: The prior art of record does not disclose a process as claimed in which a catalyst having the claimed characteristics is subjected to a presulfiding or sulfiding step prior to contacting the feed to the process to partially dewax the feed. Also, the terminal disclaimer filed on January 23, 2006 is sufficient to overcome the obviousness double patenting rejection.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

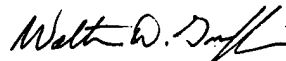
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter D. Griffin whose telephone number is (571) 272-1447. The examiner can normally be reached on M-F 6:30 to 4:00 with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Walter D. Griffin
Primary Examiner
Art Unit 1764

WG
February 7, 2006